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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,727	07/26/2001	Ralph J. Locke	CNI-100-C	8203

7590 03/26/2002
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EXAMINER

FULLER, ERIC B

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 03/26/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/915,727

Applicant(s)

LOCKE ET AL.

Examiner

Eric B Fuller

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-5 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 2-5, "the ambient environment" lacks antecedent basis.

In claim 12, it is unclear what the applicant means by "harshness".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1-8, 10, 11, 13, 17, 18, 20, and 22-25, are rejected under 35 U.S.C. 102(e) as being anticipated by Primeaux, II et al. (US 5,962,618).

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Primeaux teaches an elastomer coating material for use on a substrate. The coating, being an elastomer would inherently dampen vibrations acting on the load of the rail car while it is in motion. This material is comprised of an amine-terminated polyether polyol (column 4, lines 43-45) and an isocyanate compound (column 3, line 16). It would be inherent that these materials react when mixed. It is the Examiner's position that since this reference is applying the material to a large substrate such as a rail car and no means are taken to heat or cool the car, this reference reads on applying the material to the substrate at ambient temperatures.

As to claims 2 and 3, ambient temperature is conventionally defined to be well within the applicant's ranges.

As to claims 4 and 5, Primeaux does not explicitly teach the application pressure. However, it is the Examiner's position that because the pressures claimed by the applicant are inclusive of normal atmospheric pressure and Primeaux does not disclose that the coating is applied under a vacuum or in a high pressure system, that Primeaux reads on the applicant's claimed pressures.

As to claims 6 and 7, Primeaux teaches, by way of examples, that the amount of each compound in the material effects the cure time. The examples show cure times as low as less than 10 seconds and as high as 45 second and the compositions that are required for each. It is the Examiner's position that this reference is inclusive of cure times in between 10 and 45 seconds.

As to claims 8, Primeaux teaches to coat the interior of a rail car, which is conventionally made of metal stampings.

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As to claims 10 and 11, Primeaux teaches a high pressure, impingement mix spray system (column 8, lines 53-65).

Claim 13 is similar to claim 1, except that the "amine-terminated polymer" of claim 1 is replaced with a "polyoxalene polymer". However, the according to applicant's claim 16, the amine-terminated polyether polyols taught by Primeaux are polyoxalene polymers. Thus this claim is rejected for the reasons stated in claim 1.

As to claim 17, column 3, lines 50-58, and column 8, lines 38-52, show that the isocyanate compound may consist of an isocyanate quasi-prepolymer based on a uretonimine modified MDI and a high molecular weight polyether polyol. The table in column 8 shows that that the isocyanate content in this form is between 0 and 65%. The 2,4'-isomer content should be at least 30% of this. The taught ranges are inclusive of the applicant's claimed ranges.

As to claim 18, an alkylene carbonate is used as a plasticizer in the material (column 4, line 23).

Claim 20 is similar to claims 1 and 13, but adds the limitation of the isocyanate compound having at lest one NCO radical that is reactive with the first components. From table 1 and 4, and the examples, Primeaux teaches the use of the NCO radical that is inherently reactive with the first component.

As to claim 22, the average molecular weights given in column 4, lines 25-68, are between 1,000 and 4,000. Applicant's range is inclusive of these values.

As to claim 23, Primeaux teaches that an organic silane compound may be added in order to increase adhesion of the material (column 9, line 26).

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Claims 24 and 25 contain limitations that have been previously rejected. These claims are rejected to for the same reasons.

Claims 1-6, 8, 10, 11, 13, 14, 18, 20, and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Xiao et al. (US 6,153,709)

Xiao et al. discloses a method for dampening vibration of a substrate comprising the steps of applying a coating mixture to a panel of a vehicle, the coating comprising a blocked polyisocyanate and a polyol (abstract). It is taught that when the polyol is of the amine-terminated polyether type, that curing will exist at room temperatures.

As to claims 2 and 3, room temperature is inclusive of applicant's range.

As to claims 4 and 5, Xiao does not explicitly teach the application pressure. However, it is the Examiner's position that because the pressures claimed by the applicant are inclusive of normal atmospheric pressure and Xiao does not disclose that the coating is applied under a vacuum or in a high pressure system, that Xiao reads on the applicant's claimed pressures.

As to claim 6, Xiao teaches that the coating is cured by exposing the coating to curing conditions for 60 minutes, but preferably in 20 to 30 minutes (column 7, lines 5-15).

As to claim 8, Xiao discloses various substrates to which the coating may be applied (column 2, lines 46-57), which are included in the categories of the applicant's claimed substrates.

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As to claims 10 and 11, Xiao discloses that the coating can be applied by any means known in the art, but that preferably the formulation is sprayed on the panel using a high volume high-pressure airless sprayer that atomizes the composition (column 6, lines 51-60).

As to claim 13, Xiao teaches to use polyester polyols (column 6, line 15), which is a polyoxalene polymer.

As to claim 14, Xiao teaches chain extenders may be used in the composition (column 5, lines 60-68). Fillers may also be used (column 3, lines 18-38).

As to claim 18, Xiao discloses that the coating composition also comprises a plasticizer (column 3, lines 1-17).

As to claim 20, Xiao teaches at least one isocyanate compounds has at least one NCO radical that is reactive with the first component (column 7, line 26).

As to claim 22, Xiao discloses that the polyol has a molecular weight between 1,000 and 7,000 (column 5, line 53), which is inclusive of applicant's range.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14-16, and 19, are rejected under 35 U.S.C. 103(a) as being unpatentable over Primeaux, II et al. (US 5,962,618).

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As to claim 14, Primeaux teaches the use of chain extenders (abstract, column 5, line 53). Although Primeaux fails to explicitly teach the addition of fillers to the material, it does teach that fillers are commonly used in similar mixtures (column 2, line 6). To add fillers to the material taught by Primeaux would have been obvious at the time the invention was made to a person having ordinary skill in the art in order to increase the hardness of the compound.

As to claims 15, Primeaux teaches the use of pigments in the material. Primeaux fails to teach the use of a catalyst, specifically because the reaction and cure times are relatively small all ready. However, one skilled in the art would recognize the addition of a tertiary amine to the material would allow the reaction involving an amine-terminated polymer to occur even faster. The motivation to do so would be to achieve even faster reaction and cure times.

As to claims 16 and 26, Primeaux teaches to use polyether polyols, but is silent on the specific types. However, to use a di-, tri-, quad-, or penta- functional polyether polyol would have been obvious at the time the invention was made to a person having ordinary skill in the art with the reasonable expectation of success.

As to claims 27 and 28, these claims are rejected to for the same reason as claims 17 and 18.

As to claim 19 and 29, to select any of the applicant's claimed plasticizers would have been obvious as they are all alkylene carbonates.

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Claims 7, 9, 12, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xiao et al. (US 6,153,709).

As to claims 7 and 24, Xiao discloses all of the elements claimed by the applicant except that the coating material cures in an interval ranging between about 15 seconds and about 20 seconds. The time that it takes for the coating to cure will depend on the composition of the coating material, the temperature at which curing takes place, and the nature of the substrate. It is the Examiner's position that it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have determined the optimum time in which to cure the coating through routine experimentation in the absence of showing criticality.

As to claim 9, Examiner acknowledges that Xiao does not disclose specifically that the substrate is a body in white. However, Xiao does disclose that the substrate can be part of a vehicle and that the coating composition can be sprayed on irregular shaped articles such as the panels of an automobile. In addition, Xiao discloses that the coating is suitable to be applied as an undercoating as well as to the inner sides of the panels of the vehicle. It is the Examiner's position that the body in white claimed by the applicant would be within the general category of irregularly shaped vehicle panels disclosed by Xiao.

As to claim 12, Xiao teaches that the vibration dampening includes noise and vibration (column 1, lines 20-33).

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Claim 25 repeats limitations that have been rejected to previously in this action, however, now depend on claim 24. These claims, however, are still rejected to for the same reasons.

Claims 21 and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Primeaux, II et al. (US 5,962,618) in view of Xiao et al. (US 6,153,709).

As to claim 21 and 30, Primeaux teaches to use aliphatic diamines as the chain extenders. Therefore, to use diethyltoluene diamine as the chain extender would have been obvious. However, Primeaux fails to teach the material that is the filler. The two references share the same broad constituents and require similar characteristics. One would realize that the constituents that make up the filler in Xiao would impart the same desirable characteristics to the material taught by Primeaux. Xiao teaches that talc is a common filler for materials such as these two coatings (column 3, line 18-38). To use talc as a filler for the material taught by Primeaux would have been obvious at the time the invention was made to a person having ordinary skill in the art in order to control viscosity, rheology, shelf stability, specific gravity, and cured performance properties.

Additionally to claim 30, Primeaux teaches that the amine terminated-polymer can be in the form of a diol (column 4, lines 30-35) with average molecular weights between 1,000 and 3,000. This is inclusive of applicant's "about 2,000".

The limitations of claim 31 have all been previously rejected to in other claims. The claim is therefore rejected to for the same reasons.

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As to claim 32, Primeaux teaches that the adhesion promoter may be epoxy alkoxy silane (column 7, lines 45-55).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-32 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-29 of U.S. Patent No. 6,291,019 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because all the limitations presented in the present claims are met by the claims of the patent. The differences are obvious variants of one another.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric B Fuller whose telephone number is (703) 308-6544. The examiner can normally be reached on Tuesday through Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on (703) 308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



EBF
March 15, 2002



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